

REMARKS

Claims 1-9 are pending in this application. The Examiner rejects:

- claims 1-4 and 9 under 35 U.S.C. §103(a) as being unpatentable over Sakurai et al. (Sakurai); and
- claim 6 under 35 U.S.C. §103(a) as being unpatentable over Sakurai in view of Inoue.

Also, the Examiner objects to claims 1, 2 and 9 due to minor informalities, requires that Figs. 9 and 10 be labeled as “Prior Art”, and requires a more descriptive title of the invention.

The Examiner indicates that claims 5, 7 and 8 would be **allowable** if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regard to the Examiner’s claim objection and new title requirement, Applicant amends the claims to correct the minor informalities noted by the Examiner (these amendments do not narrow the scope of the claims - no estoppel is created), and provides a new title as suggested by the Examiner. Also, in view of the Examiner’s requirement to label Figs. 9 and 10 as “Prior Art”, Applicant submits herewith substitute drawing sheets with Figs. 9 and 10 labeled accordingly.

With regard to the Examiner’s prior art rejections, Applicant respectfully traverses these rejections as follows.

Applicant’s invention provides DSRC car-mounted equipment, which communicates with on-the-road equipment, comprising unique combinations of features including, *inter alia*, a reception sensitivity-increasing means for increasing reception sensitivity in response to the entrance into a communication area with on-the-road equipment, “wherein the reception sensitivity-increasing means returns the reception sensitivity back to the normal reception

sensitivity of before entering into communication start area in response to the end of communication with the on-the-road equipment” (see claim 1).

Sakurai is in the field of vehicle-mounted devices employed in automatic toll-collecting systems, and discloses a vehicle-mounted device 10 provided with “an electric field-strength detecting circuit 5 to detect when the field strength of radio waves emitted from the roadside device reaches or exceeds the threshold value ..., and outputs an activating signal when the field strength reaches or exceeds a threshold value” (see *Id.*, col. 3, lines 43-52). Vehicle-mounted device 10 includes a control circuit 4 which operates “at a low-power consumption mode until an activation signal is output from [circuit 5],” and actuates amplifier/demodulator 3 to begin communication with a roadside device in response to the “activation signal” (see *Id.*, col. 3, line 53 through col. 4, line 9).

With regard to claim 1, the Examiner alleges that reception sensitivity, as claimed in claim 1, is directly related to power consumption mode so that it is inherent in Sakurai for reception sensitivity to increase when switching from low power-consumption mode to normal power-consumption mode. Thus, the Examiner broadly interprets the requirement to increase reception sensitivity in response to entrance into communication area with on-the-road equipment, as claimed in claim 1, to be suggested by activation of vehicle-mounted device 10 to operate in normal power-consumption mode when entering an area of communication with the roadside device, as described in Sakurai. Also, the Examiner alleges that the requirement to return to normal reception sensitivity in response to end of communication with on-the-road equipment, as claimed in claim 1, is suggested by Sakurai’s disclosure that vehicle-mounted device 10 operates in low power-consumption mode while not in the communication area with

road-side equipment. Applicant respectfully disagrees with the Examiner's analysis, because changing reception sensitivity, as claimed in claim 1, has nothing to do with changing power consumption mode, as described in Sakurai.

In fact, in Sakurai, reception sensitivity remains the same, regardless of the power consumption mode. That is, in Sakurai, reception sensitivity is based on a threshold value (see col. 3, lines 43-46), which is set in the threshold-value circuit 52 by threshold value adjusting device 20 (see Sakurai, col. 4, lines 21-32; and Fig. 4). Nowhere does Sakurai disclose, teach or suggest that reception sensitivity of its device 10 is somehow related to power consumption mode of operation.

Sakurai also describes threshold value adjusting devices, which the Examiner cites to further support his rejections. However, this argument does not bolster the Examiner's position for the following reasons.

Sakurai discloses a threshold value setting device 20 which is not part of its vehicle-mounted device 10. Device 20 includes computer 23 and electromagnetic-shield box 22, where device 10 is placed, for performing threshold-value adjustment in circuit 52 of device 10 before device 10 is actually used in, for example, a car (see Id., col. 4, line 33 through col. 7, line 31). Such arrangement does not teach, or in any way suggest, including a reception-sensitivity increasing means, which is responsive to the entrance into a communication area with on-the-road equipment, in DSRC car-mounted equipment itself, as required by Applicant's claim 1.

Sakurai also describes threshold-value setting roadside devices 30, 40 and 41, which send "radio waves for threshold-value modifying use" to set threshold value in circuit 52 of device 10

when device 10 is mounted in, for example, a car. Nowhere does Sakurai's disclose, teach or suggest that the threshold value in circuit 52 is returned "back to the normal reception sensitivity of before entering into communication" with its roadside devices 30, 40 or 41 (or 20).

Thus, Applicant's independent claim 1, as well as its dependent claims 2-5 and 9 (which incorporate all the novel and unobvious features of their base claim 1), would not have been obvious from Sakurai.

With regard to dependent claim 6, Inoue does not supply the above-noted deficiencies of Sakurai. Therefore, claim 6 would not have been obvious from any reasonable combination of Sakurai and Inoue at least for the reasons set forth above with regard to claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

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